

(1499)

JAN 20 1995



## Environmental Services of America, Inc.

**ENSA Environmental, Inc.**

205 Main Street

P.O. Box 1760

Brattleboro, VT 05302

Phone: (802) 254-3677

1-800-359-3677

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January 19, 1995

Chuck Schwer  
VT DEC HMMD SMS  
103 South Main Street/West Building  
Waterbury, VT 05671-0404

**RE: "Environmental Site Investigation Update Report of Central Parts and Supply Inc." dated December 22, 1994**

Dear Mr. Schwer:

Enclosed please find the above-referenced report for your review.

Should you have any questions please call me at 254-3677.

Sincerely,  
ENSA Environmental, Inc.

Bruce E. Tease, Ph.D  
Project Manager

Enclosure

BET/taw

Chuck,  
I have additional wells  
as scheduled to be  
installed next January  
25 to assess the potential  
for onsite migration  
of contamination from  
an off site source.

\365.01\approval.jet

Offices Nationwide

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**Environmental Site Investigation Update Report  
of  
Central Parts and Supply Inc.  
RFD #5, Box 127A, Putney Road  
Brattleboro, VT 05301**

**DEC Site #93-1499**

*Prepared for*

First Vermont Bank  
P.O. Box 812  
Brattleboro, VT 05301

*by*

ENSA Environmental, Inc.  
205 Main Street  
Brattleboro, VT 05301

December 22, 1994

## **EXECUTIVE SUMMARY**

This report describes work performed as part of the additional Phase II environmental investigations required at the subject property by the Sites Management Section (SMS) of the Vermont Department of Environmental Conservation (VT DEC). The additional work was conducted to further assess the trend in groundwater contamination previously detected at the site.

Work conducted during the recent investigation included a full round of groundwater sampling and gauging of site monitoring wells. Analytical testing of groundwater samples for Volatile Organic Compounds via EPA Method 8260 revealed the continued presence of chlorinated and petroleum related hydrocarbons in samples collected from MW-2 and MW-5. No compounds tested for were detected in the other well samples.

Based on the persistent levels of contamination detected, the presence of gasoline related compounds, and the absence of compounds in upgradient and downgradient site wells, it may be possible that the compounds detected at wells MW-2 and MW-5 originate from a preferential migration of chlorinated and petroleum related compounds along subsurface utility lines located immediately south of monitoring wells MW-2 and MW-5.

Additional conclusions and recommendations for further assessment are presented at the end of this report.

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Environmental Site Investigation  
Update Report

Central Parts and Supply, Inc.  
Brattleboro, VT

## 1. Introduction

ENSA Environmental, Inc. of Brattleboro, Vermont (formerly known as TRI-S, Inc. Environmental Consulting) was contracted by First Vermont Bank to conduct a full round of groundwater sampling and analysis at Central Parts and Supply, Inc. located on Putney Road in Brattleboro, Vermont (see Site Locus Map in Appendix A). This work was performed pursuant to tasks requested by the Sites Management Section (SMS) of the Vermont Department of Environmental Conservation (VT DEC) and to address concerns raised in the Phase II Environmental Site Investigation Report prepared by TRI-S, Inc. and dated February 7, 1994.

## 2. Groundwater Sampling and Gauging

### 2.1 Site Hydrology

Depths to groundwater were measured from the top of the PVC well pipes of each well on November 2, 1994, by ENSA personnel. Groundwater flow was determined to be in a south-southeasterly direction similar to that of the previous sampling round. The groundwater level in monitoring well MW-5 was incongruent with the other monitoring well groundwater levels. This incongruity is most likely due to the fact that MW-5 was installed and screened at greater depths than MW-2; MW-5 was screened at a greater depth to assess the potential for increasing levels of chlorinated organic compounds within the lower aquifer. A groundwater potentiometric map is included in Appendix B.

Depth to groundwater and groundwater potentiometric readings are summarized in the following table.

Groundwater Potentiometric Chart for November 2, 1994

Wells	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
Top of PVC	98.91	97.91	99.66	98.73	98.00	97.27	97.01
Groundwater elevation	83.22	83.15	83.13	83.14	82.80	81.32	82.95
Depth to Groundwater	15.69	14.76	16.53	15.59	15.20	15.95	14.06
Top of PVC and groundwater elevation readings are measured in feet from an arbitrary datum point							

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Brattleboro, VT

The Hydraulic Gradient between wells MW-2 and MW-7 was determined to be approximately 0.0052 cm/cm. Based on a Hydraulic Conductivity value of  $10^{-1}$  cm/sec for coarse grain sand (at the groundwater table) and  $10^{-5}$  cm/sec for sandy silt (at the 20-40 foot depth range), and an effective porosity estimate of 30% for coarse grain sand and 40% for sandy silt, the groundwater velocity in the vicinity of the contaminated area of the site was approximated by using the following variation of Darcy's Equation:

$$GW_{vel} = \text{Hydraulic Conductivity} \times \text{Hydraulic Gradient}/\text{Effective Porosity}$$

**For Coarse Grain Sand**

$$GW_{vel} = 10^{-1} \text{ cm/sec} \times 0.0052 \text{ cm/cm}/0.30$$

$$GW_{vel} = 1.7 \times 10^{-3} \text{ cm/sec}$$

$$GW_{vel} = 147 \text{ cm/day}$$

**For Sandy Silt**

$$GW_{vel} = 10^{-5} \text{ cm/sec} \times 0.0052 \text{ cm/cm}/0.40$$

$$GW_{vel} = 1.3 \times 10^{-7} \text{ cm/sec}$$

$$GW_{vel} = 0.01 \text{ cm/day}$$

## 2.2 Groundwater Sampling and Analysis

On November 2, 1994, following the removal of three well volumes, groundwater samples were collected from the on-site monitoring wells and preserved in accordance with State of Vermont sampling protocol. These groundwater samples were then submitted to Alpha Analytical Laboratories located in Westborough, Massachusetts where they were analyzed for Volatile Organic Compounds via EPA Method 8260. Odors were detected during the collection of samples from MW-2 and MW-5. Monitoring well gauging and sampling information are presented in Appendix C. Please note that Method 8260 was used for the analysis of this sampling round compared to Method 8240 used last round. Method 8260 analyzes approximately 22 more compounds than Method 8240; more information concerning ketones and gasoline related compounds are provided by this method without additional charge. Results are summarized in the table presented below. Full laboratory data sheets and Chain-of-Custody statement are included in Appendix D.

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Brattleboro, VT

**Cumulative Analytical Results for  
Central Parts and Supply, Brattleboro, VT**

Date	Compound	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
11/2/94	Benzene	ND	ND	ND	ND	ND	ND	ND
	Chlorobenzene	ND	320.0	ND	ND	190	ND	ND
	Chloroethane	ND	43.0	ND	ND	76.0	ND	ND
	1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
	1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethane	ND	ND	ND	ND	39.0	ND	ND
	cis-1,2-Dichloroethylene	ND	ND	ND	ND	17.0	ND	ND
	Ethylbenzene	ND	160.0	ND	ND	5.2	ND	ND
	Xylene	ND	320.0	ND	ND	39.0	ND	ND
	n-Butylbenzene	ND	15.0	ND	ND	16.0	ND	ND
	sec-Butylbenzene	ND	ND	ND	ND	14.0	ND	ND
	Isopropylbenzene	ND	19.0	ND	ND	36.0	ND	ND
	p-Isopropyltoluene	ND	10.0	ND	ND	5.8	ND	ND
	Naphthalene	ND	60.0	ND	ND	18.0	ND	ND
	n-Propylbenzene	ND	30.0	ND	ND	ND	ND	ND
1/3/94	1,3,5-Trimethylbenzene	ND	130.0	ND	ND	77.0	ND	ND
	1,2,4-Trimethylbenzene	ND	430.0	ND	ND	97.0	ND	ND
	Benzene	Not	ND	Not	Not	4.0	ND	ND
	Chlorobenzene	Sampled	290.0	Sampled	Sampled	94.0	ND	ND
	Chloroethane		83.0			37.0	ND	ND
	1,2-Dichlorobenzene		54.0			20.0	ND	ND
	1,4-Dichlorobenzene		7.0			ND	ND	ND
	1,1-Dichloroethane		32.0			16.0	ND	ND
	cis-1,2-Dichloroethylene		22.0			8.0	ND	ND
8/10/93	Ethylbenzene		170.0			48.0	ND	ND
	Xylene		1000.0			200.0	ND	ND
	Barium (dissolved)	0.13	0.11	0.22	0.22	Well Not	Well Not	Well Not
	Chromium (dissolved)	ND	ND	.013	.013	Installed	Installed	Installed
	Chlorobenzene	ND	352.0	ND	ND			
	1,2-Dichlorobenzene	ND	17.7	ND	ND			
	1,4-Dichlorobenzene	ND	Trace	ND	ND			
	1,1-Dichloroethane	ND	26.5	ND	ND			
	cis-1,2-Dichloroethylene	ND	29.9	ND	ND			
RCRA 8 Metal results measured in milligrams per liter (mg/l) or ppm VOC results measured in micrograms per liter (ug/l) or ppb								
NT = Not Tested				Samples were only analyzed via RCRA 8 Metals on 8/10/93 ND = Not Detected (see lab results for actual detection limits)				

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Central Parts and Supply, Inc.  
Brattleboro, VT

Quantitatively and qualitatively, the volatile organic compounds (VOCs) detected in the groundwater samples collected from MW-2 and MW-5 were similar to those detected in past sampling rounds. A slight increase in the chlorinated related VOCs and a slight decrease in the BTEX compounds Xylene and Ethylbenzene were noted.

As indicated previously, MW-5 and MW-2 were screened at different depths and intervals; MW-5 was screened from 25 feet to 30 feet below grade while MW-2 was screened from 13 feet to 23 feet below grade. The difference in screening was thought to explain the quantitative variation observed in samples collected from these wells. Based on the recent detection of gasoline related compounds in the samples collected from these two wells (no such contamination was detected in upgradient or downgradient wells) it is now thought that on-site contaminant migration from an off-site source may be occurring; gasoline is not considered a potential site product.

Of particular concern is the presence of a sewer service line that originates upgradient from the site to the east and discharges to a main line in Putney Road located immediately west of the site. According to the Brattleboro DPW the depth to the sewer main in Putney Road is approximately 10 feet. Excavation of the utility trench may have created a preferential pathway in the silty soils at the site through which the petroleum and chlorinated organic compounds have migrated.

Potential upgradient sources include Fletcher's Garage and Chesire Transportation, a bus storage and maintenance facility. The town DPW recently conducted a dye test to determine the discharge point of floor drains in the Chesire Transportation garage. The testing concluded that the floor drains were not connected to the municipal sewer system and, therefore, may be discharging to the ground.

### 3. Conclusions

ENSA makes the following conclusions:

#### Determination of the Degree and Extent of Contamination at the Subject Property

Based on the field screening of soil samples and analytical results obtained to date, the extent of site contamination appears to be limited to the vicinity of the groundwater monitoring wells MW-2 and MW-5 which are located immediately south of the site building, near the former acid wash room. The level of contamination has not changed substantially since the onset of site monitoring in August of 1993.

Potential for On and/or Off Site Contaminant Migration

Based on the absence of contamination in downgradient wells and the low groundwater transport velocities estimated in the vicinity of the contaminated area, off-site migration of the contaminants detected to date via the natural groundwater flow direction does not appear to be likely.

Based on the persistent levels of contamination detected in samples collected from MW-2 and MW-5, the recent finding of gasoline related compounds in addition to the chlorinated compound detected, and the proximity of the wells to subsurface utility lines (water and sewer), a potential for on-site migration of the compounds detected does exist. An automotive service garage and bus maintenance facility with underground storage of motor fuel (diesel and/or gasoline) are also serviced by the sewer line that passes through the subject property.

Need for Additional Assessment and/or Testing

To further assess the potential for on site migration of contamination, ENSA recommends additional subsurface investigation be conducted at the site.

**4. Recommendations**

ENSA Environmental, Inc. recommends the following work be conducted at the site:

the installation of two groundwater monitoring wells at the eastern and western property limits (see the potentiometric map in Appendix B for proposed well locations). Groundwater samples should be collected from the 2 new wells and from MW-2 and tested via Method 8260;

following review of this report, a copy must be submitted to Chuck Schwer of the VT DEC;

At this time ENSA estimates that the above noted work should not exceed approximately \$2,500.00 (this would include the preparation and submittal of a final report to the VT DEC).

**Appendix A**  
**Site Location Map**

**Appendix B**  
**Groundwater Potentiometric Map**

GROUNDWATER POTENTIAL METRIC  
MAP FOR 11/2/94

CENTRAL PARTS AND SUPPLY, INC.  
PUTNEY ROAD  
BRATTLEBORO, VERMONT

LEGEND

- MH-1, MH-2, MH-3, MH-4, MH-5, MH-6, MH-7 MONITORING WELL
- 83.0 GROUNDWATER CONTOUR
- ⊕ PROPOSED MONITORING WELL LOCATIONS
- SEWER LINE
- - - - - WATER LINE
- ████████ PROPERTY LINE

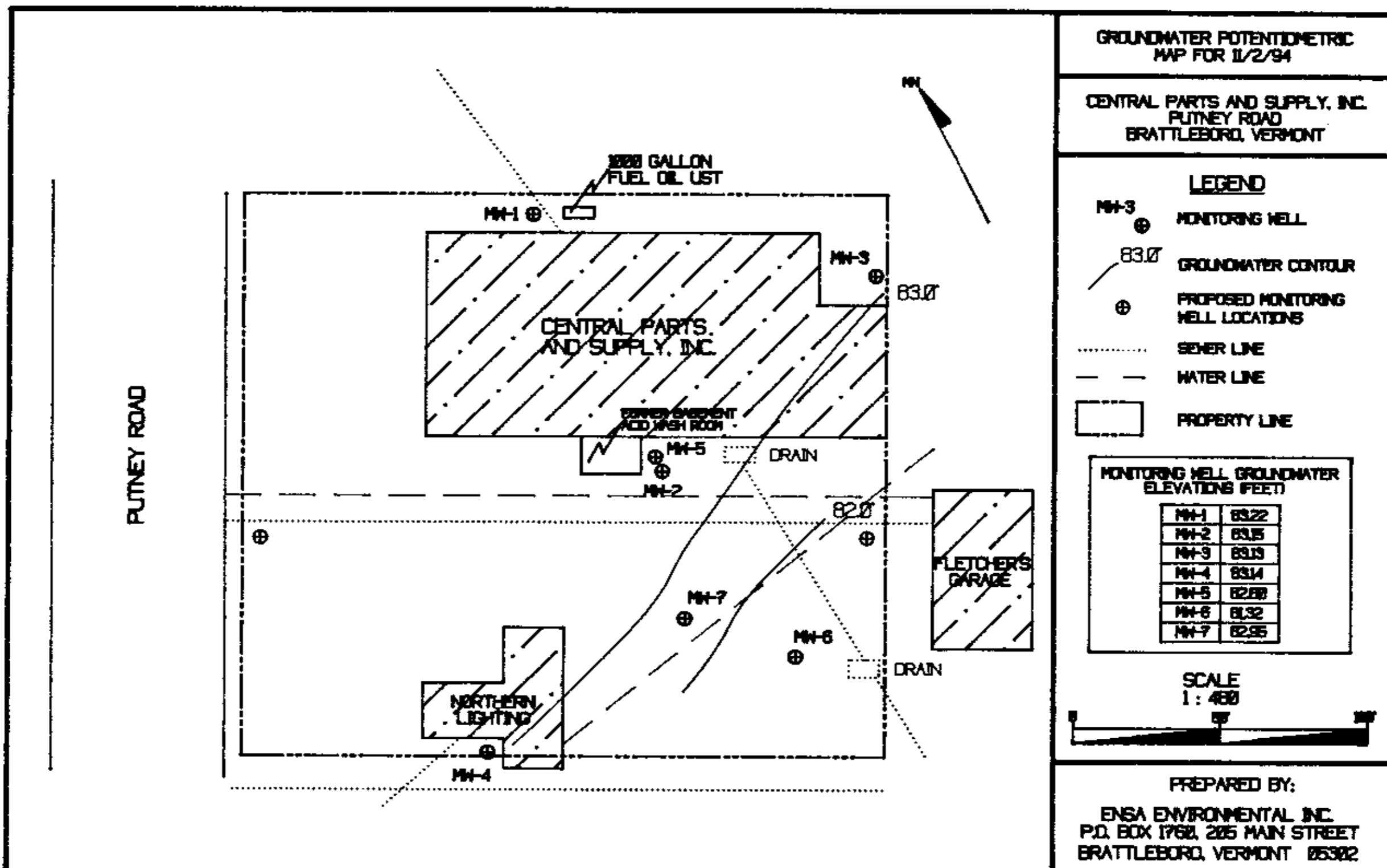
MONITORING WELL GROUNDWATER ELEVATIONS (FEET)

MH-1	83.22
MH-2	83.15
MH-3	83.13
MH-4	83.14
MH-5	82.88
MH-6	81.32
MH-7	82.55

SCALE  
1 : 400

PREPARED BY:

ENSA ENVIRONMENTAL INC.  
P.O. BOX 1760, 205 MAIN STREET  
BRATTLEBORO, VERMONT 05302



**Appendix C**  
**Monitoring Well Gauging and Sampling Log**

## Central Parts - Brattleboro, VT

TEC Job # 365.01

Please Initial: MJM & DCBDate: 11/2/94Arrive Site: 10:15Depart Site: 12:25Weather: Cold, Cloudy, Breezy, Rain within 24 hrs.Temperature: 45°F

## Sampling

Wells	Well depth	Depth to G.W.	Time Measured	Total H2O(ft.)	# of Bailers	Sample # (on bottle)	Time Sampled	Notes & Comments (water odor and appearance)
MW-1	23'	15.69	10:27	7.3	25	MW-1-112994-365	12:00	
MW-2	23'	14.76	10:42	8.2	28	MW-2-	12:19	odors
MW-3	23'	16.53	10:29	8.56	29/20	MW-3-	12:04	
MW-4	23'	15.59	10:32	7.4	25	MW-4-	12:04	
MW-5	30'	15.20	10:40	14.8	50	MW-5-	12:15	odors
MW-6	31'	15.95	10:34	15	40	MW-6-	12:10	
MW-7	20'	14.06	10:36	5.9	20	MW-7-	12:12	
Dup of MW-2						MW-02-	12:17	
Trip Blank						MW-01	12:00	Made from our distilled water

Samples analysed by EPA methods 8260 + MTBE

## Notes:

- ▶ Number of bailers needed to evacuate 3 bore volumes from each well is determined by subtracting Groundwater depth from well depth, then multiply by 3.4.

**Appendix D**  
**Laboratory Data**

## ALPHA ANALYTICAL LABORATORIES

Eight Walkup Drive  
Westborough, Massachusetts 01581-1019  
(508) 898-9220

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

RECEIVED NOV 18 1994

## CERTIFICATE OF ANALYSIS

Client: ENSA Environmental, Inc. Laboratory Job Number: L9409122  
Address: 205 Main Street; 3rd Floor Invoice Number: 68570  
Brattleboro, VT 05301 Date Received: 03-NOV-94  
Attn: Kristen Wade Date Reported: 16-NOV-94  
Project Number: 365 Delivery Method: Alpha  
Site: Central Parts

ALPHA SAMPLE NUMBER	CLIENT IDENTIFICATION	SAMPLE LOCATION
L9409122-01	MW-1-11294-365	Brattleboro, VT
L9409122-02	MW-2-11294-365	Brattleboro, VT
L9409122-03	MW-3-11294-365	Brattleboro, VT
L9409122-04	MW-4-11294-365	Brattleboro, VT
L9409122-05	MW-5-11294-365	Brattleboro, VT
L9409122-06	MW-6-11294-365	Brattleboro, VT
L9409122-07	MW-7-11294-365	Brattleboro, VT
L9409122-08	MW-02-11294-365	Brattleboro, VT
L9409122-09	MW-01-11294-365	Brattleboro, VT

Authorized by:

Scott McLean - Laboratory Director

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

RECEIVED NOV 18 1994

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9409122-01 Date Collected: 02-NOV-94  
 MW-1-11294-365 Date Received : 03-NOV-94  
 Sample Matrix: WATER Date Reported : 16-NOV-94  
 Condition of Sample: Satisfactory Field Prep: None  
 Number & Type of Containers: 2 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES
					PREP ANALYSIS
Volatile Organics by GC/MS			1	8260	11-NOV
Methylene chloride	< 5.0	ug/l			
1,1-Dichloroethane	< 1.5	ug/l			
Chloroform	< 1.5	ug/l			
Carbon tetrachloride	< 1.0	ug/l			
1,2-Dichloropropane	< 3.5	ug/l			
Dibromochloromethane	< 1.0	ug/l			
1,1,2-Trichloroethane	< 1.5	ug/l			
2-Chloroethylvinyl ether	< 10.	ug/l			
Tetrachloroethene	< 1.5	ug/l			
Chlorobenzene	< 3.5	ug/l			
Trichlorofluoromethane	< 5.0	ug/l			
1,2-Dichloroethane	< 1.5	ug/l			
1,1,1-Trichloroethane	< 1.0	ug/l			
Bromodichloromethane	< 1.0	ug/l			
trans-1,3-Dichloropropene	< 1.5	ug/l			
cis-1,3-Dichloropropene	< 1.0	ug/l			
Bromoform	< 1.0	ug/l			
1,1,2,2-Tetrachloroethane	< 1.0	ug/l			
Benzene	< 1.0	ug/l			
Toluene	< 1.5	ug/l			
Ethylbenzene	< 1.0	ug/l			
Chloromethane	< 10.	ug/l			
Bromomethane	< 2.0	ug/l			
Vinyl chloride	< 3.5	ug/l			
Chloroethane	< 2.0	ug/l			
1,1-Dichloroethene	< 1.5	ug/l			
trans-1,2-Dichloroethene	< 1.5	ug/l			
Trichloroethene	< 1.0	ug/l			
1,2-Dichlorobenzene	< 10.	ug/l			
1,3-Dichlorobenzene	< 10.	ug/l			
1,4-Dichlorobenzene	< 10.	ug/l			
Methyl tert butyl ether	< 10.	ug/l			
Xylenes	< 1.0	ug/l			
cis-1,2-Dichloroethene	< 1.0	ug/l			
Dibromomethane	< 10.	ug/l			
1,4-Dichlorobutane	< 10.	ug/l			
Iodomethane	< 10.	ug/l			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-01

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS continued					
1,2,3-Trichloropropane	< 10.	ug/l	1	8260	11-NOV
Styrene	< 1.0	ug/l			
Dichlorodifluoromethane	< 10.	ug/l			
Acetone	< 10.	ug/l			
Carbon Disulfide	< 10.	ug/l			
2-Butanone	< 4.5	ug/l			
Vinyl Acetate	< 10.	ug/l			
4-Methyl-2-pentanone	< 10.	ug/l			
2-Hexanone	< 10.	ug/l			
Ethyl methacrylate	< 10.	ug/l			
Acrolein	< 25.	ug/l			
Acrylonitrile	< 10.	ug/l			
Bromochloromethane	< 1.0	ug/l			
2,2-Dichloropropane	< 1.0	ug/l			
1,2-Dibromoethane	< 1.0	ug/l			
1,3-Dichloropropane	< 1.0	ug/l			
1,1,1,2-Tetrachloroethane	< 1.0	ug/l			
Bromobenzene	< 1.0	ug/l			
n-Butylbenzene	< 1.0	ug/l			
sec-Butylbenzene	< 1.0	ug/l			
tert-Butylbenzene	< 1.0	ug/l			
o-Chlorotoluene	< 1.0	ug/l			
p-Chlorotoluene	< 1.0	ug/l			
1,2-Dibromo-3-chloropropane	< 1.0	ug/l			
Hexachlorobutadiene	< 1.0	ug/l			
Isopropylbenzene	< 1.0	ug/l			
p-Isopropyltoluene	< 1.0	ug/l			
Naphthalene	< 1.0	ug/l			
n-Propylbenzene	< 1.0	ug/l			
1,2,3-Trichlorobenzene	< 1.0	ug/l			
1,2,4-Trichlorobenzene	< 1.0	ug/l			
1,3,5-Trimethylbenzene	< 1.0	ug/l			
1,2,4-Trimethylbenzene	< 1.0	ug/l			
trans-1,4-Dichloro-2-butene	< 1.0	ug/l			
Ethyl ether	< 25.	ug/l			
SURROGATE RECOVERY					
Toluene-d8	93.0	%			
4-Bromofluorobenzene	86.0	%			
Dibromofluoromethane	93.0	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

RECEIVED NOV 18 1994

Laboratory Sample Number: L9409122-02 Date Collected: 02-NOV-94  
 MW-2-11294-365 Date Received : 03-NOV-94  
 Sample Matrix: WATER Date Reported : 16-NOV-94  
 Condition of Sample: Satisfactory Field Prep: None  
 Number & Type of Containers: 2 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS			1	8260	11-NOV
Methylene chloride	< 50.	ug/l			
1,1-Dichloroethane	< 15.	ug/l			
Chloroform	< 15.	ug/l			
Carbon tetrachloride	< 10.	ug/l			
1,2-Dichloropropane	< 35.	ug/l			
Dibromochloromethane	< 10.	ug/l			
1,1,2-Trichloroethane	< 15.	ug/l			
2-Chloroethylvinyl ether	< 100	ug/l			
Tetrachloroethene	< 15.	ug/l			
Chlorobenzene	320	ug/l			
Trichlorofluoromethane	< 50.	ug/l			
1,2-Dichloroethane	< 15.	ug/l			
1,1,1-Trichloroethane	< 10.	ug/l			
Bromodichloromethane	< 10.	ug/l			
trans-1,3-Dichloropropene	< 15.	ug/l			
cis-1,3-Dichloropropene	< 10.	ug/l			
Bromoform	< 10.	ug/l			
1,1,2,2-Tetrachloroethane	< 10.	ug/l			
Benzene	< 10.	ug/l			
Toluene	< 15.	ug/l			
Ethylbenzene	160	ug/l			
Chloromethane	< 100	ug/l			
Bromomethane	< 20.	ug/l			
Vinyl chloride	< 35.	ug/l			
Chloroethane	43.	ug/l			
1,1-Dichloroethene	< 15.	ug/l			
trans-1,2-Dichloroethene	< 15.	ug/l			
Trichloroethene	< 10.	ug/l			
1,2-Dichlorobenzene	< 100	ug/l			
1,3-Dichlorobenzene	< 100	ug/l			
1,4-Dichlorobenzene	< 100	ug/l			
Methyl tert butyl ether	< 100	ug/l			
Xylenes	320	ug/l			
cis-1,2-Dichloroethene	< 10.	ug/l			
Dibromomethane	< 100	ug/l			
1,4-Dichlorobutane	< 100	ug/l			
Iodomethane	< 100	ug/l			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-02

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS continued			1	8260	11-NOV
1,2,3-Trichloropropane	< 100	ug/l			
Styrene	< 10.	ug/l			
Dichlorodifluoromethane	< 100	ug/l			
Acetone	< 100	ug/l			
Carbon Disulfide	< 100	ug/l			
2-Butanone	< 45.	ug/l			
Vinyl Acetate	< 100	ug/l			
4-Methyl-2-pentanone	< 100	ug/l			
2-Hexanone	< 100	ug/l			
Ethyl methacrylate	< 100	ug/l			
Acrolein	< 250	ug/l			
Acrylonitrile	< 100	ug/l			
Bromochloromethane	< 10.	ug/l			
2,2-Dichloropropane	< 10.	ug/l			
1,2-Dibromoethane	< 10.	ug/l			
1,3-Dichloropropane	< 10.	ug/l			
1,1,1,2-Tetrachloroethane	< 10.	ug/l			
Bromobenzene	< 10.	ug/l			
n-Butylbenzene	15.	ug/l			
sec-Butylbenzene	< 10.	ug/l			
tert-Butylbenzene	< 10.	ug/l			
o-Chlorotoluene	< 10.	ug/l			
p-Chlorotoluene	< 10.	ug/l			
1,2-Dibromo-3-chloropropane	< 10.	ug/l			
Hexachlorobutadiene	< 10.	ug/l			
Isopropylbenzene	19.	ug/l			
p-Isopropyltoluene	10.	ug/l			
Naphthalene	60.	ug/l			
n-Propylbenzene	30.	ug/l			
1,2,3-Trichlorobenzene	< 10.	ug/l			
1,2,4-Trichlorobenzene	< 10.	ug/l			
1,3,5-Trimethylbenzene	130	ug/l			
1,2,4-Trimethylbenzene	430	ug/l			
trans-1,4-Dichloro-2-butene	< 10.	ug/l			
Ethyl ether	< 250	ug/l			
SURROGATE RECOVERY					
Toluene-d8	96.0	%			
4-Bromofluorobenzene	93.0	%			
Dibromofluoromethane	94.0	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

RECEIVED NOV 18 1994

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number:	L9409122-03 MW-3-11294-365	Date Collected: 02-NOV-94 Date Received : 03-NOV-94 Date Reported : 16-NOV-94
Sample Matrix:	WATER	
Condition of Sample:	Satisfactory	Field Prep: None
Number & Type of Containers:	2 Vial	

PARAMETER	RESULT	UNITS	REF	METHOD		DATES PREP ANALYSIS
				METHOD	ANALYSIS	
Volatile Organics by GC/MS			1	8260		11-NOV
Methylene chloride	< 5.0	ug/l				
1,1-Dichloroethane	< 1.5	ug/l				
Chloroform	< 1.5	ug/l				
Carbon tetrachloride	< 1.0	ug/l				
1,2-Dichloropropane	< 3.5	ug/l				
Dibromochloromethane	< 1.0	ug/l				
1,1,2-Trichloroethane	< 1.5	ug/l				
2-Chloroethylvinyl ether	< 10.	ug/l				
Tetrachloroethene	< 1.5	ug/l				
Chlorobenzene	< 3.5	ug/l				
Trichlorofluoromethane	< 5.0	ug/l				
1,2-Dichloroethane	< 1.5	ug/l				
1,1,1-Trichloroethane	< 1.0	ug/l				
Bromodichloromethane	< 1.0	ug/l				
trans-1,3-Dichloropropene	< 1.5	ug/l				
cis-1,3-Dichloropropene	< 1.0	ug/l				
Bromoform	< 1.0	ug/l				
1,1,2,2-Tetrachloroethane	< 1.0	ug/l				
Benzene	< 1.0	ug/l				
Toluene	< 1.5	ug/l				
Ethylbenzene	< 1.0	ug/l				
Chloromethane	< 10.	ug/l				
Bromomethane	< 2.0	ug/l				
Vinyl chloride	< 3.5	ug/l				
Chloroethane	< 2.0	ug/l				
1,1-Dichloroethene	< 1.5	ug/l				
trans-1,2-Dichloroethene	< 1.5	ug/l				
Trichloroethene	< 1.0	ug/l				
1,2-Dichlorobenzene	< 10.	ug/l				
1,3-Dichlorobenzene	< 10.	ug/l				
1,4-Dichlorobenzene	< 10.	ug/l				
Methyl tert butyl ether	< 10.	ug/l				
Xylenes	< 1.0	ug/l				
cis-1,2-Dichloroethene	< 1.0	ug/l				
Dibromomethane	< 10.	ug/l				
1,4-Dichlorobutane	< 10.	ug/l				
Iodomethane	< 10.	ug/l				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-03

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES
					PREP ANALYSIS
Volatile Organics by GC/MS continued					
1,2,3-Trichloropropane	< 10.	ug/l	1	8260	11-NOV
Styrene	< 1.0	ug/l			
Dichlorodifluoromethane	< 10.	ug/l			
Acetone	< 10.	ug/l			
Carbon Disulfide	< 10.	ug/l			
2-Butanone	< 4.5	ug/l			
Vinyl Acetate	< 10.	ug/l			
4-Methyl-2-pentanone	< 10.	ug/l			
2-Hexanone	< 10.	ug/l			
Ethyl methacrylate	< 10.	ug/l			
Acrolein	< 25.	ug/l			
Acrylonitrile	< 10.	ug/l			
Bromochloromethane	< 1.0	ug/l			
2,2-Dichloropropane	< 1.0	ug/l			
1,2-Dibromoethane	< 1.0	ug/l			
1,3-Dichloropropane	< 1.0	ug/l			
1,1,1,2-Tetrachloroethane	< 1.0	ug/l			
Bromobenzene	< 1.0	ug/l			
n-Butylbenzene	< 1.0	ug/l			
sec-Butylbenzene	< 1.0	ug/l			
tert-Butylbenzene	< 1.0	ug/l			
o-Chlorotoluene	< 1.0	ug/l			
p-Chlorotoluene	< 1.0	ug/l			
1,2-Dibromo-3-chloropropane	< 1.0	ug/l			
Hexachlorobutadiene	< 1.0	ug/l			
Isopropylbenzene	< 1.0	ug/l			
p-Isopropyltoluene	< 1.0	ug/l			
Naphthalene	< 1.0	ug/l			
n-Propylbenzene	< 1.0	ug/l			
1,2,3-Trichlorobenzene	< 1.0	ug/l			
1,2,4-Trichlorobenzene	< 1.0	ug/l			
1,3,5-Trimethylbenzene	< 1.0	ug/l			
1,2,4-Trimethylbenzene	< 1.0	ug/l			
trans-1,4-Dichloro-2-butene	< 1.0	ug/l			
Ethyl ether	< 25.	ug/l			
SURROGATE RECOVERY					
Toluene-d8	105.	%			
4-Bromofluorobenzene	107.	%			
Dibromofluoromethane	108.	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

RECEIVED NOV 18 1994

Laboratory Sample Number: L9409122-04 Date Collected: 02-NOV-94  
 MW-4-11294-365 Date Received : 03-NOV-94  
 Sample Matrix: WATER Date Reported : 16-NOV-94  
 Condition of Sample: Satisfactory Field Prep: None  
 Number & Type of Containers: 2 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS			1	8260	11-NOV
Methylene chloride	< 5.0	ug/l			
1,1-Dichloroethane	< 1.5	ug/l			
Chloroform	< 1.5	ug/l			
Carbon tetrachloride	< 1.0	ug/l			
1,2-Dichloropropane	< 3.5	ug/l			
Dibromochloromethane	< 1.0	ug/l			
1,1,2-Trichloroethane	< 1.5	ug/l			
2-Chloroethylvinyl ether	< 10.	ug/l			
Tetrachloroethene	< 1.5	ug/l			
Chlorobenzene	< 3.5	ug/l			
Trichlorofluoromethane	< 5.0	ug/l			
1,2-Dichloroethane	< 1.5	ug/l			
1,1,1-Trichloroethane	< 1.0	ug/l			
Bromodichloromethane	< 1.0	ug/l			
trans-1,3-Dichloropropene	< 1.5	ug/l			
cis-1,3-Dichloropropene	< 1.0	ug/l			
Bromoform	< 1.0	ug/l			
1,1,2,2-Tetrachloroethane	< 1.0	ug/l			
Benzene	< 1.0	ug/l			
Toluene	< 1.5	ug/l			
Ethylbenzene	< 1.0	ug/l			
Chloromethane	< 10.	ug/l			
Bromomethane	< 2.0	ug/l			
Vinyl chloride	< 3.5	ug/l			
Chloroethane	< 2.0	ug/l			
1,1-Dichloroethene	< 1.5	ug/l			
trans-1,2-Dichloroethene	< 1.5	ug/l			
Trichloroethene	< 1.0	ug/l			
1,2-Dichlorobenzene	< 10.	ug/l			
1,3-Dichlorobenzene	< 10.	ug/l			
1,4-Dichlorobenzene	< 10.	ug/l			
Methyl tert butyl ether	< 10.	ug/l			
Xylenes	< 1.0	ug/l			
cis-1,2-Dichloroethene	< 1.0	ug/l			
Dibromomethane	< 10.	ug/l			
1,4-Dichlorobutane	< 10.	ug/l			
Iodomethane	< 10.	ug/l			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-04

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS continued					
1,2,3-Trichloropropane	< 10.	ug/l			
Styrene	< 1.0	ug/l			
Dichlorodifluoromethane	< 10.	ug/l			
Acetone	< 10.	ug/l			
Carbon Disulfide	< 10.	ug/l			
2-Butanone	< 4.5	ug/l			
Vinyl Acetate	< 10.	ug/l			
4-Methyl-2-pentanone	< 10.	ug/l			
2-Hexanone	< 10.	ug/l			
Ethyl methacrylate	< 10.	ug/l			
Acrolein	< 25.	ug/l			
Acrylonitrile	< 10.	ug/l			
Bromochloromethane	< 1.0	ug/l			
2,2-Dichloropropane	< 1.0	ug/l			
1,2-Dibromoethane	< 1.0	ug/l			
1,3-Dichloropropane	< 1.0	ug/l			
1,1,1,2-Tetrachloroethane	< 1.0	ug/l			
Bromobenzene	< 1.0	ug/l			
n-Butylbenzene	< 1.0	ug/l			
sec-Butylbenzene	< 1.0	ug/l			
tert-Butylbenzene	< 1.0	ug/l			
o-Chlorotoluene	< 1.0	ug/l			
p-Chlorotoluene	< 1.0	ug/l			
1,2-Dibromo-3-chloropropane	< 1.0	ug/l			
Hexachlorobutadiene	< 1.0	ug/l			
Isopropylbenzene	< 1.0	ug/l			
p-Isopropyltoluene	< 1.0	ug/l			
Naphthalene	< 1.0	ug/l			
n-Propylbenzene	< 1.0	ug/l			
1,2,3-Trichlorobenzene	< 1.0	ug/l			
1,2,4-Trichlorobenzene	< 1.0	ug/l			
1,3,5-Trimethylbenzene	< 1.0	ug/l			
1,2,4-Trimethylbenzene	< 1.0	ug/l			
trans-1,4-Dichloro-2-butene	< 1.0	ug/l			
Ethyl ether	< 25.	ug/l			
SURROGATE RECOVERY					
Toluene-d8	97.0	%			
4-Bromofluorobenzene	92.0	%			
Dibromofluoromethane	101.	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

RECEIVED NOV 18 1994

Laboratory Sample Number: L9409122-05 Date Collected: 02-NOV-94  
 MW-5-11294-365 Date Received : 03-NOV-94  
 Sample Matrix: WATER Date Reported : 16-NOV-94  
 Condition of Sample: Satisfactory Field Prep: None  
 Number & Type of Containers: 2 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES	
					PREP ANALYSIS	
Volatile Organics by GC/MS			1	8260		10-NOV
Methylene chloride	< 25.	ug/l				
1,1-Dichloroethane	39.	ug/l				
Chloroform	< 7.5	ug/l				
Carbon tetrachloride	< 5.0	ug/l				
1,2-Dichloropropane	< 18.	ug/l				
Dibromochloromethane	< 5.0	ug/l				
1,1,2-Trichloroethane	< 7.5	ug/l				
2-Chloroethylvinyl ether	< 50.	ug/l				
Tetrachloroethene	< 7.5	ug/l				
Chlorobenzene	190	ug/l				
Trichlorofluoromethane	< 25.	ug/l				
1,2-Dichloroethane	< 7.5	ug/l				
1,1,1-Trichloroethane	< 5.0	ug/l				
Bromodichloromethane	< 5.0	ug/l				
trans-1,3-Dichloropropene	< 7.5	ug/l				
cis-1,3-Dichloropropene	< 5.0	ug/l				
Bromoform	< 5.0	ug/l				
1,1,2,2-Tetrachloroethane	< 5.0	ug/l				
Benzene	< 5.0	ug/l				
Toluene	< 7.5	ug/l				
Ethylbenzene	5.2	ug/l				
Chloromethane	< 50.	ug/l				
Bromomethane	< 10.	ug/l				
Vinyl chloride	< 18.	ug/l				
Chloroethane	76.	ug/l				
1,1-Dichloroethene	< 7.5	ug/l				
trans-1,2-Dichloroethene	< 7.5	ug/l				
Trichloroethene	< 5.0	ug/l				
1,2-Dichlorobenzene	< 50.	ug/l				
1,3-Dichlorobenzene	< 50.	ug/l				
1,4-Dichlorobenzene	< 50.	ug/l				
Methyl tert butyl ether	< 50.	ug/l				
Xylenes	39.	ug/l				
cis-1,2-Dichloroethene	17.	ug/l				
Dibromomethane	< 50.	ug/l				
1,4-Dichlorobutane	< 50.	ug/l				
Iodomethane	< 50.	ug/l				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-05

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS continued					
1,2,3-Trichloropropane	< 50.	ug/l			
Styrene	< 5.0	ug/l			
Dichlorodifluoromethane	< 50.	ug/l			
Acetone	< 50.	ug/l			
Carbon Disulfide	< 50.	ug/l			
2-Butanone	< 23.	ug/l			
Vinyl Acetate	< 50.	ug/l			
4-Methyl-2-pentanone	< 50.	ug/l			
2-Hexanone	< 50.	ug/l			
Ethyl methacrylate	< 50.	ug/l			
Acrolein	< 130	ug/l			
Acrylonitrile	< 50.	ug/l			
Bromochloromethane	< 5.0	ug/l			
2,2-Dichloropropane	< 5.0	ug/l			
1,2-Dibromoethane	< 5.0	ug/l			
1,3-Dichloropropane	< 5.0	ug/l			
1,1,1,2-Tetrachloroethane	< 5.0	ug/l			
Bromobenzene	< 5.0	ug/l			
n-Butylbenzene	16.	ug/l			
sec-Butylbenzene	14.	ug/l			
tert-Butylbenzene	< 5.0	ug/l			
o-Chlorotoluene	< 5.0	ug/l			
p-Chlorotoluene	< 5.0	ug/l			
1,2-Dibromo-3-chloropropane	< 5.0	ug/l			
Hexachlorobutadiene	< 5.0	ug/l			
Isopropylbenzene	36.	ug/l			
p-Isopropyltoluene	5.8	ug/l			
Naphthalene	18.	ug/l			
n-Propylbenzene	< 5.0	ug/l			
1,2,3-Trichlorobenzene	< 5.0	ug/l			
1,2,4-Trichlorobenzene	< 5.0	ug/l			
1,3,5-Trimethylbenzene	77.	ug/l			
1,2,4-Trimethylbenzene	97.	ug/l			
trans-1,4-Dichloro-2-butene	< 5.0	ug/l			
Ethyl ether	< 130	ug/l			
SURROGATE RECOVERY					
Toluene-d8	93.0	%			
4-Bromofluorobenzene	90.0	%			
Dibromofluoromethane	93.0	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

RECEIVED NOV 18 1994

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number:	L9409122-06 MW-6-11294-365	Date Collected: 02-NOV-94 Date Received : 03-NOV-94 Date Reported : 16-NOV-94
Sample Matrix:	WATER	
Condition of Sample:	Satisfactory	Field Prep: None
Number & Type of Containers:	2 Vial	

PARAMETER	RESULT	UNITS	REF	METHOD		DATES PREP ANALYSIS
				METHOD	ANALYSIS	
Volatile Organics by GC/MS			1	8260		09-NOV
Methylene chloride	< 5.0	ug/l				
1,1-Dichloroethane	< 1.5	ug/l				
Chloroform	< 1.5	ug/l				
Carbon tetrachloride	< 1.0	ug/l				
1,2-Dichloropropane	< 3.5	ug/l				
Dibromochloromethane	< 1.0	ug/l				
1,1,2-Trichloroethane	< 1.5	ug/l				
2-Chloroethylvinyl ether	< 10.	ug/l				
Tetrachloroethene	< 1.5	ug/l				
Chlorobenzene	< 3.5	ug/l				
Trichlorofluoromethane	< 5.0	ug/l				
1,2-Dichloroethane	< 1.5	ug/l				
1,1,1-Trichloroethane	< 1.0	ug/l				
Bromodichloromethane	< 1.0	ug/l				
trans-1,3-Dichloropropene	< 1.5	ug/l				
cis-1,3-Dichloropropene	< 1.0	ug/l				
Bromoform	< 1.0	ug/l				
1,1,2,2-Tetrachloroethane	< 1.0	ug/l				
Benzene	< 1.0	ug/l				
Toluene	< 1.5	ug/l				
Ethylbenzene	< 1.0	ug/l				
Chloromethane	< 10.	ug/l				
Bromomethane	< 2.0	ug/l				
Vinyl chloride	< 3.5	ug/l				
Chloroethane	< 2.0	ug/l				
1,1-Dichloroethene	< 1.5	ug/l				
trans-1,2-Dichloroethene	< 1.5	ug/l				
Trichloroethene	< 1.0	ug/l				
1,2-Dichlorobenzene	< 10.	ug/l				
1,3-Dichlorobenzene	< 10.	ug/l				
1,4-Dichlorobenzene	< 10.	ug/l				
Methyl tert butyl ether	< 10.	ug/l				
Xylenes	< 1.0	ug/l				
cis-1,2-Dichloroethene	< 1.0	ug/l				
Dibromomethane	< 10.	ug/l				
1,4-Dichlorobutane	< 10.	ug/l				
Iodomethane	< 10.	ug/l				

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-06

RECEIVED NOV 8 1994  
PREP ANALYSIS

PARAMETER	RESULT	UNITS	REF	METHOD	DATES 8 NOV 1994
Volatile Organics by GC/MS continued					
1,2,3-Trichloropropane	< 10.	ug/l			
Styrene	< 1.0	ug/l			
Dichlorodifluoromethane	< 10.	ug/l			
Acetone	< 10.	ug/l			
Carbon Disulfide	< 10.	ug/l			
2-Butanone	< 4.5	ug/l			
Vinyl Acetate	< 10.	ug/l			
4-Methyl-2-pentanone	< 10.	ug/l			
2-Hexanone	< 10.	ug/l			
Ethyl methacrylate	< 10.	ug/l			
Acrolein	< 25.	ug/l			
Acrylonitrile	< 10.	ug/l			
Bromochloromethane	< 1.0	ug/l			
2,2-Dichloropropane	< 1.0	ug/l			
1,2-Dibromoethane	< 1.0	ug/l			
1,3-Dichloropropane	< 1.0	ug/l			
1,1,1,2-Tetrachloroethane	< 1.0	ug/l			
Bromobenzene	< 1.0	ug/l			
n-Butylbenzene	< 1.0	ug/l			
sec-Butylbenzene	< 1.0	ug/l			
tert-Butylbenzene	< 1.0	ug/l			
o-Chlorotoluene	< 1.0	ug/l			
p-Chlorotoluene	< 1.0	ug/l			
1,2-Dibromo-3-chloropropane	< 1.0	ug/l			
Hexachlorobutadiene	< 1.0	ug/l			
Isopropylbenzene	< 1.0	ug/l			
p-Isopropyltoluene	< 1.0	ug/l			
Naphthalene	< 1.0	ug/l			
n-Propylbenzene	< 1.0	ug/l			
1,2,3-Trichlorobenzene	< 1.0	ug/l			
1,2,4-Trichlorobenzene	< 1.0	ug/l			
1,3,5-Trimethylbenzene	< 1.0	ug/l			
1,2,4-Trimethylbenzene	< 1.0	ug/l			
trans-1,4-Dichloro-2-butene	< 1.0	ug/l			
Ethyl ether	< 25.	ug/l			
SURROGATE RECOVERY					
Toluene-d8	92.0	%			
4-Bromofluorobenzene	90.0	%			
Dibromofluoromethane	94.0	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

RECEIVED NOV 18 1994

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9409122-07 Date Collected: 02-NOV-94  
MW-7-11294-365 Date Received : 03-NOV-94

Sample Matrix: WATER Date Reported : 16-NOV-94

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 2 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS			1	8260	09-NOV
Methylene chloride	< 5.0	ug/l			
1,1-Dichloroethane	< 1.5	ug/l			
Chloroform	< 1.5	ug/l			
Carbon tetrachloride	< 1.0	ug/l			
1,2-Dichloropropane	< 3.5	ug/l			
Dibromochloromethane	< 1.0	ug/l			
1,1,2-Trichloroethane	< 1.5	ug/l			
2-Chloroethylvinyl ether	< 10.	ug/l			
Tetrachloroethene	< 1.5	ug/l			
Chlorobenzene	< 3.5	ug/l			
Trichlorofluoromethane	< 5.0	ug/l			
1,2-Dichloroethane	< 1.5	ug/l			
1,1,1-Trichloroethane	< 1.0	ug/l			
Bromodichloromethane	< 1.0	ug/l			
trans-1,3-Dichloropropene	< 1.5	ug/l			
cis-1,3-Dichloropropene	< 1.0	ug/l			
Bromoform	< 1.0	ug/l			
1,1,2,2-Tetrachloroethane	< 1.0	ug/l			
Benzene	< 1.0	ug/l			
Toluene	< 1.5	ug/l			
Ethylbenzene	< 1.0	ug/l			
Chloromethane	< 10.	ug/l			
Bromomethane	< 2.0	ug/l			
Vinyl chloride	< 3.5	ug/l			
Chloroethane	< 2.0	ug/l			
1,1-Dichloroethene	< 1.5	ug/l			
trans-1,2-Dichloroethene	< 1.5	ug/l			
Trichloroethene	< 1.0	ug/l			
1,2-Dichlorobenzene	< 10.	ug/l			
1,3-Dichlorobenzene	< 10.	ug/l			
1,4-Dichlorobenzene	< 10.	ug/l			
Methyl tert butyl ether	< 10.	ug/l			
Xylenes	< 1.0	ug/l			
cis-1,2-Dichloroethene	< 1.0	ug/l			
Dibromomethane	< 10.	ug/l			
1,4-Dichlorobutane	< 10.	ug/l			
Iodomethane	< 10.	ug/l			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-07

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS continued					
1,2,3-Trichloropropane	< 10.	ug/l			
Styrene	< 1.0	ug/l			
Dichlorodifluoromethane	< 10.	ug/l			
Acetone	< 10.	ug/l			
Carbon Disulfide	< 10.	ug/l			
2-Butanone	< 4.5	ug/l			
Vinyl Acetate	< 10.	ug/l			
4-Methyl-2-pentanone	< 10.	ug/l			
2-Hexanone	< 10.	ug/l			
Ethyl methacrylate	< 10.	ug/l			
Acrolein	< 25.	ug/l			
Acrylonitrile	< 10.	ug/l			
Bromochloromethane	< 1.0	ug/l			
2,2-Dichloropropane	< 1.0	ug/l			
1,2-Dibromoethane	< 1.0	ug/l			
1,3-Dichloropropane	< 1.0	ug/l			
1,1,1,2-Tetrachloroethane	< 1.0	ug/l			
Bromobenzene	< 1.0	ug/l			
n-Butylbenzene	< 1.0	ug/l			
sec-Butylbenzene	< 1.0	ug/l			
tert-Butylbenzene	< 1.0	ug/l			
o-Chlorotoluene	< 1.0	ug/l			
p-Chlorotoluene	< 1.0	ug/l			
1,2-Dibromo-3-chloropropane	< 1.0	ug/l			
Hexachlorobutadiene	< 1.0	ug/l			
Isopropylbenzene	< 1.0	ug/l			
p-Isopropyltoluene	< 1.0	ug/l			
Naphthalene	< 1.0	ug/l			
n-Propylbenzene	< 1.0	ug/l			
1,2,3-Trichlorobenzene	< 1.0	ug/l			
1,2,4-Trichlorobenzene	< 1.0	ug/l			
1,3,5-Trimethylbenzene	< 1.0	ug/l			
1,2,4-Trimethylbenzene	< 1.0	ug/l			
trans-1,4-Dichloro-2-butene	< 1.0	ug/l			
Ethyl ether	< 25.	ug/l			
SURROGATE RECOVERY					
Toluene-d8	107.	%			
4-Bromofluorobenzene	104.	%			
Dibromofluoromethane	115.	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

RECEIVED NOV 18 1994

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9409122-08 Date Collected: 02-NOV-94  
MW-02-11294-365 Date Received : 03-NOV-94

Sample Matrix: WATER Date Reported : 16-NOV-94

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 2 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS			1	8260	10-NOV
Methylene chloride	< 50.	ug/l			
1,1-Dichloroethane	< 15.	ug/l			
Chloroform	< 15.	ug/l			
Carbon tetrachloride	< 10.	ug/l			
1,2-Dichloropropane	< 35.	ug/l			
Dibromochloromethane	< 10.	ug/l			
1,1,2-Trichloroethane	< 15.	ug/l			
2-Chloroethylvinyl ether	< 100	ug/l			
Tetrachloroethene	< 15.	ug/l			
Chlorobenzene	250	ug/l			
Trichlorofluoromethane	< 50.	ug/l			
1,2-Dichloroethane	< 15.	ug/l			
1,1,1-Trichloroethane	< 10.	ug/l			
Bromodichloromethane	< 10.	ug/l			
trans-1,3-Dichloropropene	< 15.	ug/l			
cis-1,3-Dichloropropene	< 10.	ug/l			
Bromoform	< 10.	ug/l			
1,1,2,2-Tetrachloroethane	< 10.	ug/l			
Benzene	< 10.	ug/l			
Toluene	< 15.	ug/l			
Ethylbenzene	57.	ug/l			
Chloromethane	< 100	ug/l			
Bromomethane	< 20.	ug/l			
Vinyl chloride	< 35.	ug/l			
Chloroethane	45.	ug/l			
1,1-Dichloroethene	< 15.	ug/l			
trans-1,2-Dichloroethene	< 15.	ug/l			
Trichloroethene	< 10.	ug/l			
1,2-Dichlorobenzene	< 100	ug/l			
1,3-Dichlorobenzene	< 100	ug/l			
1,4-Dichlorobenzene	< 100	ug/l			
Methyl tert butyl ether	< 100	ug/l			
Xylenes	230	ug/l			
cis-1,2-Dichloroethene	< 10.	ug/l			
Dibromomethane	< 100	ug/l			
1,4-Dichlorobutane	< 100	ug/l			
Iodomethane	< 100	ug/l			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-08

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES
					PREP ANALYSIS
Volatile Organics by GC/MS continued			1	8260	10-NOV
1,2,3-Trichloropropane	< 100	ug/l			
Styrene	< 10.	ug/l			
Dichlorodifluoromethane	< 100	ug/l			
Acetone	< 100	ug/l			
Carbon Disulfide	< 100	ug/l			
2-Butanone	< 45.	ug/l			
Vinyl Acetate	< 100	ug/l			
4-Methyl-2-pentanone	< 100	ug/l			
2-Hexanone	< 100	ug/l			
Ethyl methacrylate	< 100	ug/l			
Acrolein	< 250	ug/l			
Acrylonitrile	< 100	ug/l			
Bromochloromethane	< 10.	ug/l			
2,2-Dichloropropane	< 10.	ug/l			
1,2-Dibromoethane	< 10.	ug/l			
1,3-Dichloropropane	< 10.	ug/l			
1,1,1,2-Tetrachloroethane	< 10.	ug/l			
Bromobenzene	< 10.	ug/l			
n-Butylbenzene	11.	ug/l			
sec-Butylbenzene	< 10.	ug/l			
tert-Butylbenzene	< 10.	ug/l			
o-Chlorotoluene	< 10.	ug/l			
p-Chlorotoluene	< 10.	ug/l			
1,2-Dibromo-3-chloropropane	< 10.	ug/l			
Hexachlorobutadiene	< 10.	ug/l			
Isopropylbenzene	15.	ug/l			
p-Isopropyltoluene	25.	ug/l			
Naphthalene	35.	ug/l			
n-Propylbenzene	24.	ug/l			
1,2,3-Trichlorobenzene	< 10.	ug/l			
1,2,4-Trichlorobenzene	< 10.	ug/l			
1,3,5-Trimethylbenzene	100	ug/l			
1,2,4-Trimethylbenzene	300	ug/l			
trans-1,4-Dichloro-2-butene	< 10.	ug/l			
Ethyl ether	< 250	ug/l			
SURROGATE RECOVERY					
Toluene-d8	94.0	%			
4-Bromofluorobenzene	92.0	%			
Dibromofluoromethane	92.0	%			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

RECEIVED NOV 18 1994

MA 086 NH 198958-A CT PH-0574 NY 11148 NC 320 SC 88006 RI A65

Laboratory Sample Number: L9409122-09 Date Collected: 02-NOV-94  
MW-01-11294-365 Date Received : 03-NOV-94  
Sample Matrix: WATER Date Reported : 16-NOV-94

Condition of Sample: Satisfactory Field Prep: None

Number & Type of Containers: 1 Vial

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS			1	8260	09-NOV
Methylene chloride	< 5.0	ug/l			
1,1-Dichloroethane	< 1.5	ug/l			
Chloroform	< 1.5	ug/l			
Carbon tetrachloride	< 1.0	ug/l			
1,2-Dichloropropane	< 3.5	ug/l			
Dibromochloromethane	< 1.0	ug/l			
1,1,2-Trichloroethane	< 1.5	ug/l			
2-Chloroethylvinyl ether	< 10.	ug/l			
Tetrachloroethene	< 1.5	ug/l			
Chlorobenzene	< 3.5	ug/l			
Trichlorofluoromethane	< 5.0	ug/l			
1,2-Dichloroethane	< 1.5	ug/l			
1,1,1-Trichloroethane	< 1.0	ug/l			
Bromodichloromethane	< 1.0	ug/l			
trans-1,3-Dichloropropene	< 1.5	ug/l			
cis-1,3-Dichloropropene	< 1.0	ug/l			
Bromoform	< 1.0	ug/l			
1,1,2,2-Tetrachloroethane	< 1.0	ug/l			
Benzene	< 1.0	ug/l			
Toluene	< 1.5	ug/l			
Ethylbenzene	< 1.0	ug/l			
Chloromethane	< 10.	ug/l			
Bromomethane	< 2.0	ug/l			
Vinyl chloride	< 3.5	ug/l			
Chloroethane	< 2.0	ug/l			
1,1-Dichloroethene	< 1.5	ug/l			
trans-1,2-Dichloroethene	< 1.5	ug/l			
Trichloroethene	< 1.0	ug/l			
1,2-Dichlorobenzene	< 10.	ug/l			
1,3-Dichlorobenzene	< 10.	ug/l			
1,4-Dichlorobenzene	< 10.	ug/l			
Methyl tert butyl ether	< 10.	ug/l			
Xylenes	< 1.0	ug/l			
cis-1,2-Dichloroethene	< 1.0	ug/l			
Dibromomethane	< 10.	ug/l			
1,4-Dichlorobutane	< 10.	ug/l			
Iodomethane	< 10.	ug/l			

Comments: Complete list of References and Glossary of Terms found in Addendum I

ALPHA ANALYTICAL LABORATORIES  
CERTIFICATE OF ANALYSIS

Laboratory Sample Number: L9409122-09

RECEIVED NOV 18 1994

PARAMETER	RESULT	UNITS	REF	METHOD	DATES PREP ANALYSIS
Volatile Organics by GC/MS continued					
1,2,3-Trichloropropane	< 10.	ug/l			
Styrene	< 1.0	ug/l			
Dichlorodifluoromethane	< 10.	ug/l			
Acetone	< 10.	ug/l			
Carbon Disulfide	< 10.	ug/l			
2-Butanone	< 4.5	ug/l			
Vinyl Acetate	< 10.	ug/l			
4-Methyl-2-pentanone	< 10.	ug/l			
2-Hexanone	< 10.	ug/l			
Ethyl methacrylate	< 10.	ug/l			
Acrolein	< 25.	ug/l			
Acrylonitrile	< 10.	ug/l			
Bromochloromethane	< 1.0	ug/l			
2,2-Dichloropropane	< 1.0	ug/l			
1,2-Dibromoethane	< 1.0	ug/l			
1,3-Dichloropropane	< 1.0	ug/l			
1,1,1,2-Tetrachloroethane	< 1.0	ug/l			
Bromobenzene	< 1.0	ug/l			
n-Butylbenzene	< 1.0	ug/l			
sec-Butylbenzene	< 1.0	ug/l			
tert-Butylbenzene	< 1.0	ug/l			
o-Chlorotoluene	< 1.0	ug/l			
p-Chlorotoluene	< 1.0	ug/l			
1,2-Dibromo-3-chloropropane	< 1.0	ug/l			
Hexachlorobutadiene	< 1.0	ug/l			
Isopropylbenzene	< 1.0	ug/l			
p-Isopropyltoluene	< 1.0	ug/l			
Naphthalene	< 1.0	ug/l			
n-Propylbenzene	< 1.0	ug/l			
1,2,3-Trichlorobenzene	< 1.0	ug/l			
1,2,4-Trichlorobenzene	< 1.0	ug/l			
1,3,5-Trimethylbenzene	< 1.0	ug/l			
1,2,4-Trimethylbenzene	< 1.0	ug/l			
trans-1,4-Dichloro-2-butene	< 1.0	ug/l			
Ethyl ether	< 25.	ug/l			
SURROGATE RECOVERY					
Toluene-d8	94.0	%			
4-Bromofluorobenzene	92.0	%			
Dibromofluoromethane	99.0	%			
Comments: Complete list of References and Glossary of Terms found in Addendum I					

ALPHA ANALYTICAL LABORATORIES  
QUALITY ASSURANCE MS/MSD ANALYSIS

Laboratory Job Number: L9409122

RECEIVED NOV 18 1994

Parameter	MS %	MSD %	RPD
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 05-09			
1,1-Dichloroethene	104	100	4
Trichloroethene	104	98	6
Benzene	106	100	6
Toluene	104	102	2
Chlorobenzene	98	97	1
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 03			
1,1-Dichloroethene	104	100	4
Trichloroethene	104	98	6
Benzene	106	100	6
Toluene	104	102	2
Chlorobenzene	98	97	1
Volatile Organics by GC/MS Spike Recovery MS/MSD for sample(s) 01-02,04			
1,1-Dichloroethene	108	92	16
Trichloroethene	101	103	2
Benzene	103	100	3
Toluene	111	106	5
Chlorobenzene	97	96	1

ALPHA ANALYTICAL LABS  
ADDENDUM I

RECEIVED NOV 18 1994

REFERENCES

1. Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. 1986.

GLOSSARY OF TERMS AND SYMBOLS

- < Indicates analyte not detected at stated value, i.e. Reporting Detection Limit.  
REF Reference number in which test method may be found.  
METHOD Method number by which analysis was performed.

**ALPHA**

Analytical Laboratories, Inc.

Westborough, MA 01581-1019  
508-898-9220 FAX 508-898-9193**CHAIN OF CUSTODY RECORD**  
**and ANALYSIS REQUEST RECORD**

No.

Sheet 1 of 1

Company Name: <b>TRI-S, Inc. Environmental Consulting</b>		Project Number: <b>365</b>		Project Name/Location: <b>Central Woods Brattleboro, VT</b>		Date Received in Lab:	Date Due:		
		P.O. Number: <b>21046</b>				<b>11/3</b>	<b>11/17</b>		
Company Address: <b>205 Main Street 3rd Floor Brattleboro, VT 05301</b>		Phone Number: (802) <b>254-3677</b>		Project Manager: <b>Kirsten Wade</b>		Alpha Job Number: (Lab use only) <b>9409122</b>			
		FAX No.: <b>254-7630</b>							
<b>ALPHA</b> Lab # (Lab Use Only)	<b>Sample I.D.</b>	Container Codes: P = Plastic V = Vial C = Cube G = Glass A = Amber Glass B = Bacteria Container O = Other		Method Preserve. (number of containers)	Sampling	MATRIX / SOURCE CODES			
		Containers (number/type)	Matrix / Source			Unpres.	Ice	Nitric	Sulfuric
1	MW-1-11294-365	2/✓	G.W	X		11.2.94	12:00	8240	N/C
2	MW-2-						12:19		
3	MW-3-						12:04		
4	MW-4-						12:04		
5	MW-5-						12:15		
6	MW-6-						12:10		
7	MW-7-						12:12		
8	MW-02-						12:17		
9	MW-01-	1/✓					12:06		N/C
Sampler's Signature <i>J. Miller</i>		Attestation	Date	Time	NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
			11.2.94	1:35	1	<i>From Weather</i>	<i>Paul Bluff</i>	11.3.94	3:15P
ADDITIONAL COMMENTS:					2	<i>Paul Bluff</i>	<i>S. McQuillan</i>	11.3.94	5:18P
					3				
					4				

*Trip blank/duplicate included*